New OTDR Units for the AQ7280 Optical Time Domain Reflectometer

Multi task touch module One OTDR

The AQ7280 series optical time domain reflectometer (OTDR) measures the length of optical fibers, assesses optical losses, and identifies failure locations.

This product is useful for installation and maintenance work of a wide range of optical networks from metro networks to access networks including fiber to the home (FTTH) networks. The AQ7280 series OTDR is highly evaluated by users for its excellent functionality and operability, such as detachable OTDR units, multi-touch touchscreen, and multitasking capability.

Three new OTDR units (AQ7283J, AQ7283E, and AQ7282G) and a light source option (AQ7282M) have been added to the AQ7280 series.

MAJOR FEATURES

■ AQ7283J OTDR (1310/1383/1550/1625 nm)

- Figure 1 shows the wavelength characteristics of a single-mode optical fiber (SMF). In conventional SMF, optical loss increases at 1383 nm since optical fibers of this type contain a large amount of hydroxyl ions (OH), which absorb light of this wavelength. Meanwhile, low-OH fibers show low optical loss. The AQ7283J OTDR with a light source of 1383 nm efficiently measures and evaluates optical loss around this wavelength.
- The AQ7283J OTDR can be used to inspect optical fibers and their manufacturing processes, and to check communication networks in the field when studying the feasibility of introducing CWDM networks.
- Figure 2 shows traces measured by the AQ7283J OTDR on a low-OH SMF and a conventional SMF.

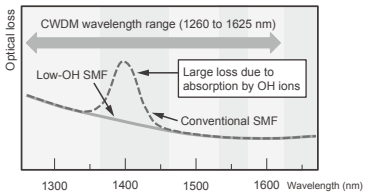

Figure 1 Wavelength characteristics of SMF

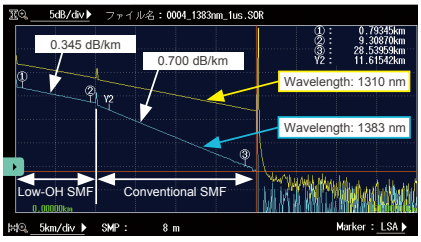

Figure 2 Traces measured by AQ7283J OTDR

■ AQ7283E OTDR (1310/1550 nm + filtered 1625 nm)

- A built-in 1625 nm port with a cut filter enables live lines to be measured without disturbing active communications signals.
- The wavelength accuracy of 1625 nm ± 10 nm is guaranteed to enable maintenance of 10GE-PON, which has a wavelength restriction.

AQ7280 OTDR series

■ AQ7282G OTDR (1310/1490/1550 nm)

- The AQ7282G OTDR is suitable for installation and maintenance work of FTTH networks, which require measurements at 1490 nm.
- The AQ7282G OTDR requires a lower initial cost than the AQ7283K, a four-wavelength model with a light source of 1625 nm.

■ Light source option for AQ7282M OTDR

- It is a stabilized light source for multi-mode fibers (MMF).
- This option is efficient for measuring optical loss in MMF networks.

MAJOR SPECIFICATIONS

■ AQ7283J, AQ7283E, and AQ7282G

Model	Wavelength (nm)	EDZ (m)	ADZ (m)	DR (dB)
AQ7283J	1310±25	0.6	3.5	42
	1383±2		4	39
	1550±25		4	40
	1625±25		4	40
AQ7283E	1310±25	0.6	3.5	42
	1550±25		4	40
	1625±10		4	40
AQ7282G	1310±25	0.6	3.5	38
	1490±15		4	36
	1550±25		4	36

* EDZ: Event dead zone (typical), ADZ: Attenuation dead zone (typical), DR: Dynamic range (typical)

■ Light source option for AQ7282M OTDR

- Wavelength : 850/1300 ± 30 nm
- Optical output power : –20 dBm or more
- Output power stability : ±0.15 dB

Contact us:

Yokogawa Meters & Instruments Corporation

URL: http://tmi.yokogawa.com/

E-mail: tm@cs.jp.yokogawa.com

For worldwide locations, please see the back cover.